REMARKS

Claims 1-20 are currently pending in the application. By this amendment, the specification, abstract and claim 4 are amended for informalities, and claims 12-20 are added for the Examiner's consideration. Support for added claims 12-20 is provided in at least Figures 3-5 and at page(s) 6-8 and 10-11 of the present specification. No new matter is added. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

Objection to Abstract

The abstract of the disclosure has been objected to for using implied phrases and repeating information given in the title. By this amendment, the abstract is amended to remove implied phrases and to avoid repeating information given in the title. Applicants respectfully request that the objection be with drawn.

Objection to Specification

The specification has been objected to for informalities on pages 6 and 7. By this amendment, the informalities have been corrected.[1] Applicants respectfully request that the objection be with drawn.

Objection to Claims

Claims 4, 6, 8 and 9 were objected to for informalities. Claim 4 was objected to for a misplaced comma. The misplaced comma in claim 4 has been corrected. Claims 6, 8 and 9 were objected to for an alleged grammatical error regarding the placement of the word "the." Applicants note that the placement of the word "the" is as intended and is correct because

[1] The Examiner indicated that "drawing reference 345" is incorrect. However, reference number "335" was incorrect and has been corrected.

antecedent basis for the element following "the" has been provided. Accordingly, Applicants respectfully request that the objection to claims 4, 6, 8 and 9 be withdrawn.

35 U.S.C. §102 Rejection

Claims 1, 2, 4, 6, 8 and 9 were rejected under 35 U.S.C. §102(e) for being anticipated by U. S. Patent No. 6,313,921 issued to Kadowaki ("Kadowaki"). This rejection is respectfully traversed.

The invention is directed to tailoring content of information delivered over the Internet to a requesting user and includes passing a request object to an arbiter. After receiving the request object, the arbiter analyzes the request object, selects a personalization engine which then identifies tailored information in a database. The tailored information is passed to the user's computer. This is in contrast to Kadowaki which is directed to an image forming apparatus which uses a key corresponding to a user for identifying image forming information to be used in forming an image for the user. Thus, Kadowaki does not anticipate the claimed invention because it does not select a personalization engine, and it does not use the personalization engine to identify and retrieve a personalized content object.

In an embodiment of the invention, tailoring information to characteristics of an information user, including passing a request object containing at least one profile element to an arbiter is provided. Also included is selecting a personalization engine from a plurality of personalization engines by the arbiter, and accessing a content database to retrieve a personalized content object identified by the selected personalization engine. Implementations also include accessing a profile database that stores profile elements associated with the request object, retrieving from the profile database at least one profile element, and including in the request object the at least one profile elements.

In operation, input logic receives the request object from a user, and passes it to an arbiter. The arbiter has two outputs where one of the outputs passes the request object to one of a plurality of personalization engines. The other output of the arbiter passes a signal for

selecting and enabling a particular personalization engine, as determined by the arbiter. The selected personalization engine, which tailors information by selecting a particular personalization content object, analyzes the profile elements in the request object. Based on the analysis, the personalization engine identifies a content object stored in a content database. The selected personal content object is retrieved through a content database proxy and is passed to output logic such as a modem or other communication interface. The output logic passes the personal content object to the user's application program. Accordingly, embodiments of the invention include two selection processes.

The first selection process is conducted by the arbiter. The arbiter selects a personalization engine according to various methods. For example, the arbiter may choose a personalization engine by using standard object-oriented analysis. The arbiter may also use an expert system for selection that is rule-based, model-based, or knowledge-based. The arbiter makes its selection based on information that is provided by the request object, a profile database, or a combination of the two. The arbiter then chooses a personalization engine which is best adapted to making the best choice of which personalized content object to be retrieved from the content database.

The second selection process is conducted by the personalization engine chosen by the arbiter. Once chosen, the personalization engine receives and analyzes the request object, and based on the outcome of the analysis identifies a personal content object to be retrieved from the content database. Various types of personalization engines are available for the arbiter to select. For example, the personalization engine may include a business-rules engine, a collaborative-filtering engine, or a predictive-modeling engine. Thus, the actual processing steps of the second selection process are determined by the personalization engine choice.

Kadowaki does not show the features of the claimed invention because Kadowaki simply retrieves information linked to an ID without any selection process. For example, Kadowaki is directed to an image forming apparatus where the image forming apparatus receives from an external apparatus image forming information containing a key for designating acquisition of set-

up information corresponding to the key for image formation. The key is a user ID for identifying the image forming information and contains a machine type ID information, and apparatus ID information for identifying external apparatuses. Consequently, the key is simply used to designate acquisition of pre-existing setup information corresponding to the key. As such, Kadowaki does not first select a personalization engine and then use that personalization engine to access a database to further select personalized information, as in the claimed invention.

Another implementation of the invention includes retrieving from a profile database profile elements associated with the request object, and including the profile element in the request object. Accordingly, these features further distinguish the claimed invention from Kadowaki because the user ID linking process used by Kadowaki does not use any information beyond the user ID for identifying the image forming information and acquiring set-up information.

The Examiner is of the opinion, though, thatthe Kadowaki printer controller is an arbiter which directs personalization information to a personalization server at column 18, lines 38-61. This is not accurate. The printer controller of Kadowaki does not engage in a selection process. Rather, it simply responds to a description designating personalization in a print job by sending apparatus ID information to a personalizing server which, for example, identifies a machine type of printer via a number for use in the image formation process. Identifying a particular machine by ID information simply relies on linking a particular machine to an ID number, and requires no analysis and selection based on multiple variables as used in the invention.

Additionally, the Examiner is of the opinion that the use of a plurality of personalizing servers at column 15, lines 41-45 of Kadowaki selects a personalization engine from a plurality of personalization engines by the arbiter. This, again, is not accurate. The Kadowaki process is not an analysis and selection process resulting in a decision by distilling multiple pieces of information as used by the invention, nor is the Kadowaki process carried out by an arbiter capable of refining or altering its selection based on multiple pieces of information as used in the

invention. Rather, the Kadwaki process simply links a user ID to a set of image formation information, with no accompanying information analysis.

Accordingly, for the reasons set forth above, Kadowaki fails to disclose a method of tailoring information including selecting a personalization engine from a plurality of personalization engines by an arbiter and accessing a content database to retrieve a personalized content object identified by the personalization engine. Consequently, claims 1 and 8 are in allowable condition. Claims 2, 4 and 6, and 9 are allowable at least for the reasons discussed above with respect the independent claims 1 and 8, from which they respectively depend, as well as for their added features.

Accordingly, Applicants respectfully request that the rejection of claims 1, 2, 4, 6, 8 and 9 be withdrawn.

35 U.S.C. §103 Rejection

Claims 3, 5, 10 and 11 were rejected under 35 U.S.C. §103(a) for being unpatentable over Kadowaki in view of U. S. Patent No. 6,044,376 issued to Kurtzman, II ("Kurtzman"). Claim 7 was rejected under 35 U.S.C. §103(a) over Kadowaki in view of U.S. Patent No. 6,064,980 to Jacobi, *et al.* ("Jacobi") and U.S. Patent No. 6,556,963 to Tetzlaff ("Tetzlaff"). These rejections are respectfully traversed.

Applicants note that a § 103 rejection requires the Examiner to first establish a prima facie case of obviousness: "The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." M.P.E.P. § 2142. The Court of Appeals for the Federal Circuit has set forth three elements which must be shown for prima facie obviousness:

> To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference

> or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

However, Applicants submit that the combination of references suggested by the Examiner does not show all the features of the claimed invention. For example, neither Kadowaki or Kurtzman show two selection processes using an arbiter for the first selection process and a personalization engine for the second selection process.

I. Kadowaki and Kurtzman

As described above, Kadowaki does not use two selection processes incorporating an arbiter and a personalization engine. Instead, Kadowaki simply links a user ID to information. Kurtzman fails to cure the deficiencies of Kadowaki because it does only a single selection process. For example, Kurtzman is directed to content stream analysis where an "affinity" is determined by calculating the similarities between advertisements and a content stream. The calculated affinity is then used to help select an advertisement to be shown to a user.

The affinity is calculated from a content stream vector including content stream, demographic, geographic, psychographic, digital identification, and HTTP information. Examples of such information, respectively includes particular pages selected by a user, income, where the user lives, responses to a questionnaire, user domain and protocol information. An advertisement feature vector is also created for each advertisement using the frequency occurrence of selected words in the advertisement. The affinity is then calculated from the content stream vector and the advertisement feature vector, and an advertisement presented to the user based upon the affinity measurement.

Accordingly, Kurtzman calculates two numbers and then selects an advertisement based on those two numbers. This is in contrast to the invention where an arbiter makes a first

determination based on a first set of information, and then a personalization engine makes a second determination based on a second set of information.

The Examiner asserts that Kurtzman teaches the method wherein the application program is a Web browser at column 3, lines 32-37. However, such a feature fails to address Kadowaki and Kurtzman's lack of two selection processes as set forth in the claims.

Consequently, the Examiner has failed to establish a prima facie case of obviousness over claims 1 and 8. Claims 1 and 8 are thus distinguishable over the references of record and are in allowable condition. Claims 3 and 5, and 10 and 11 are allowable at least for the reasons discussed above with respect to independent claims 1 and 8, from which they respectively depend, as well as for their added features.

Accordingly, Applicants respectfully request that the rejection over claims 3, 5, 10 and 11 be withdrawn.

II. Kadowaki, Jacobi and Tetzlaff

The Examiner cites Jacobi at column 2, lines 18-20 for using collaborative filtering techniques to recommend items. However, the filtering technique shown in Jacobi consist only of compiling ratings and presenting subsets of title based on the ratings. There is no plurality of of personalization engines, as set forth in claim 7. Furthermore, Jacobi describes only one selection process, and thus does not show using at least two of a rule-based, predictive-modeling based, and a collaborative filtering personalization engine, as set forth in claim 7. It should also be noted that the "collaborative filtering" techniques mentioned in Jacobi refer to a collaborative voting process, and does not refer to the collaborative filtering personalization engine set forth in claim 7.

The Examiner cites Tetzlaff at column 2, lines 22-27 for showing a rule-based engine. However, Tetzlaff only shows passing a food descriptor to a feedback generator as the only available option. There is no plurality of personalization engines, as set forth in claim 7. Furthermore,Tetzlaff describes only one selection process, and thus does not show using at least

two of a rule-based, predictive-modeling based, and a collaborative filtering personalization engine, as set forth in claim 7. It should also be noted that the "rule-based" descriptors mentioned in Tetzlaff refers to dietary rules, and does not refer to a rule-based search engine set forth in claim 7.

Accordingly, the Examiner has failed to set forth a prima facie case of obviousness based on the combination of Kadowaki Jacobi and Tetzlaff over claim 7. Consequently, claim 7 is in allowable condition, and the rejection should be withdrawn.

New Claims

By this amendment, new claims 12-20 are added. Claims 12-14 depend from allowable claim 1 and add further distinguishing features including using at least one of an object-oriented analysis or an expert-system analysis process, and analyzing at least one of a date of the request object, a user identity, a user shopping history, or a user usage path, and thus should be in allowable condition.

Claims 14-17 depend from allowable claim 8 and add further distinguishing features including an arbiter configured to receive a request object from a user and a profile element from a profile database, and at least one of an object-oriented arbiter or an expert-system arbiter, and thus should be in allowable condition.

Independent Claim 18 sets forth an arbiter selecting a personalization engine, and the personalization engine selecting a personalized content object, and is allowable for the reasons discussed above. Claims 19-20 depend from allowable claim 18 and add further distinguishing features including the arbiter receiving a request object from a user, and sending the selected personalized content object to the user's application program, and thus should be in allowable condition.

Prompt examination and allowance in due course of new claims 12-20 are respectfully requested

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 09-0457.

Respectfully submitted,

Randall H. Cherry
Registration No. 51,556

Andrew M. Calderon
Registration No. 38,093

McGuireWoods, LLP
Suite 1800
1750 Tysons Blvd.
McLean, VA 22102
(703) 712-5426

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